

Appl. No. 10/823,953
Amdt. dated November 2, 2007
Reply to Office Action of March 23, 2007

Amendments to the Claims:

Listing of Claims:

1. (Currently Amended) A process for preparing a composite material comprising mixing at least one natural fiber, at least one polypropylene resin, and at least one functionalized polypropylene homopolymer coupling agent to provide said composite material; wherein said functionalized polypropylene homopolymer coupling agent possesses a molecular weight distribution of greater than 2.5 (M_w/M_n by GPC) and comprises a base polypropylene homopolymer resin that is grafted with a total of more than about 1 mmole of at least one polar monomer per 100 grams of functionalized homopolymer polypropylene coupling agent.
2. (Original) The process of claim 1 wherein the natural fiber is selected from the group consisting of wood flour, wood fiber, and agricultural fiber.
3. (Original) The process of claim 1 wherein the natural fiber is selected from the group consisting of wood flour, wood fiber, hemp, flax, and kenaf.
4. (Original) The process of claim 1 wherein the natural fiber is employed at a level in the range of from about 20 to about 85 weight % based on the total formulation weight of the composite material.

Appl. No. 10/823,953
Amdt. dated November 2, 2007
Reply to Office Action of March 23, 2007

5. (Currently Amended) The process of claim 1 wherein the base polypropylene homopolymer resin is grafted with a total of more than about 5 mmole of at least one polar monomer per 100 grams of functionalized polypropylene homopolymer coupling agent.
6. (Currently Amended) The process of claim 1 wherein the base polypropylene homopolymer resin is grafted with a total of more than about 10 mmole of at least one polar monomer per 100 grams of functionalized polypropylene homopolymer coupling agent.
7. (Previously Presented) The process of claim 1 wherein the polypropylene resin is a polypropylene copolymer comprising a major proportion of propylene combined with a minor proportion of a second monomer selected from the group consisting of ethylene and C₄-C₁₆ monomer materials.
8. (Canceled)
9. (Previously Presented) The process of claim 1 wherein the polypropylene resin is polypropylene homopolymer.
10. (Canceled)

Appl. No. 10/823,953
Amdt. dated November 2, 2007
Reply to Office Action of March 23, 2007

11. (Original) The process of claim 1 wherein the polar monomer is selected from the group consisting of ethylenically unsaturated carboxylic acids, ethylenically unsaturated carboxylic acid anhydrides, and derivatives of the foregoing.

12. (Original) The process of claim 11 wherein the polar monomer is selected from the group consisting of maleic acid, fumaric acid, itaconic acid, crotonic acid, acrylic acid, methacrylic acid, maleic anhydride, itaconic anhydride, substituted maleic anhydrides, and derivatives of the foregoing.

13. (Original) The process of claim 1 wherein the polar monomer is maleic anhydride.

14. (Currently Amended) A composite material prepared by a process comprising mixing at least one natural fiber, at least one polypropylene resin, and at least one functionalized polypropylene homopolymer coupling agent to provide said composite material; wherein said functionalized polypropylene homopolymer coupling agent possesses a molecular weight distribution of greater than 2.5 (M_w/M_n by GPC) and comprises a base polypropylene homopolymer resin that is grafted with a total of more than about 1 mmole of at least one polar monomer per 100 grams of functionalized polypropylene homopolymer coupling agent.

Appl. No. 10/823,953
Amdt. dated November 2, 2007
Reply to Office Action of March 23, 2007

15. (Currently Amended) A composite material comprising at least one natural fiber, at least one polypropylene resin, at least one functionalized polypropylene homopolymer coupling agent, and at least one lubricant selected from the group consisting of fatty acid amides and fatty acid esters; wherein said functionalized polypropylene homopolymer coupling agent possesses a molecular weight distribution of greater than 2.5 (M_w/M_n by GPC) and comprises a base polypropylene homopolymer resin that is grafted with a total of more than about 1 mmole of at least one polar monomer per 100 grams of functionalized polypropylene homopolymer coupling agent.